

031004

13281 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	2132.0180000
First Inventor	Duan et al.
Title	Nano-Enabled Memory Devices And Anisotropic Charge Carrying Arrays
Express Mail Label No.	

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 54]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the invention
  - Brief Summary of the invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 23]
5. Oath or Declaration [Total Sheets       ]
- a. ☐ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other: ..... Authorization under 37CFR 1.136(a)(3)  
The name of the assignee is: Nanosys, Inc.

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information:

Examiner

To be assigned

Art Unit: To be assigned

For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 26111 OR ☐ Correspondence address below

Name Sterne, Kessler, Goldstein &amp; Fox P.L.L.C.

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type) Jeffrey S. Weaver

Registration No. (Attorney/Agent)

45,608

Signature

Date

3-10-04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

22581 U.S. PTO  
10/796413

031004



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbala  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugaisky  
Donald J. Featherstone  
Michael V. Messenger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Heidi L. Kraus  
Edward W. Yee  
Albert L. Ferro\*  
Donald R. Banowit  
Peter A. Jackman  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Eldora Ellison Floyd  
Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaston  
Kimberly N. Reddick  
Theodore A. Wood

Elizabeth J. Haanes  
Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Lhulier  
Rae Lynn Prengaman  
Jane Shershenovich\*  
Lawrence J. Carroll\*  
George S. Bardmesser  
Daniel A. Klein\*  
Jason D. Eisenberg  
Michael D. Specht  
Andrea J. Kamage  
Tracy L. Muller\*  
LuAnne M. DeSantis  
John J. Figueroa  
Ann E. Summerfield  
Tiera S. Coston\*  
Aric W. Ledford\*

Michael D. Specht  
Jessica L. Parezo  
Timothy A. Doyle\*  
Cynthia M. Bouchez  
Nicole D. Dretar\*  
Ted J. Ebersole  
  
**Registered Patent Agents\***  
Karen R. Markowicz  
Nancy J. Leith  
Helene C. Carlson  
Gaby L. Longsworth  
Matthew J. Dowd  
Aaron L. Schwartz  
Mary B. Tung  
Katrina Y. Pei Quach  
Bryan L. Skelton  
Robert A. Schwartzman

Teresa A. Colella  
Jeffrey S. Lundgren  
Victoria S. Rutherford  
Eric D. Hayes  
Michelle K. Holoubek  
Robert H. DeSelms  
Simon J. Elliott  
Julie A. Heider  
Mita Mukerjee  
Scott M. Woodhouse  
  
**Of Counsel**  
Kenneth C. Bass III  
Evan R. Smith  
Marvin C. Guthrie  
  
\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice limited to Federal Agencies

March 10, 2004

**WRITER'S DIRECT NUMBER:**  
(202) 772-8831  
**INTERNET ADDRESS:**  
JWEAVER@SKGF.COM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Mail Stop Patent Application**

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)  
Appl. No. To be assigned; Filed: March 10, 2004  
For: **Nano-Enabled Memory Devices and Anisotropic Charge Carrying Arrays**  
Inventors: Duan *et al.*  
Our Ref: 2132.0180000

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. USPTO Utility Patent Application Transmittal Form PTO/SB/05;
2. 37 C.F.R. § 1.136(a)(3) Authorization to Treat a Reply As Incorporating An Extension of Time;
3. U.S. Utility Patent Application entitled:

**Nano-Enabled Memory Devices and Anisotropic Charge Carrying Arrays**

and naming as inventors:

**Xiangfeng Duan, Chunming Niu, David Stumbo and Calvin Chow**

the application comprising:

- a. an Application Data Sheet (37 C.F.R. § 1.76);
- b. specification containing:
  - i. 41 pages of description prior to the claims;

Commissioner for Patents  
March 10, 2004  
Page 2

- ii. 12 pages of claims (89 claims); and
- iii. a one (1) page abstract;
- c. 23 sheets of drawings: (Figures 1-16, 17A, 17B, 18-44);
- 4. Information Disclosure Statement;
- 5. Form PTO-1449 citing documents (1 sheet);
- 6. Copy of the cited document (AR1) on Form PTO-1449; and
- 7. Two (2) return postcards.

The name of the assignee is Nanosys, Inc.

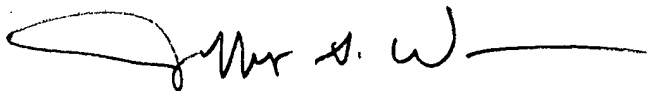
Correspondence should be sent to Customer Number 26111.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

This patent application is being submitted under 37 C.F.R. § 1.53(b) without Declaration and without filing fee.

Respectfully submitted,

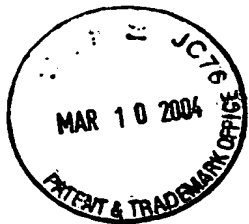
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey S. Weaver  
Attorney for Applicants  
Registration No. 45,608

JSW/asl  
Enclosures

239559v1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Duan *et al.*

Appl. No.: To be assigned

Filed: March 10, 2004

For: **Nano-Enabled Memory Devices  
and Anisotropic Charge Carrying  
Arrays**

Confirmation No.: n/a

Art Unit: To be assigned

Examiner: To be assigned

Atty. Docket: 2132.0180000

**Authorization to Treat a Reply as Incorporating an  
Extension of Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jeffrey S. Weaver  
Attorney for Applicants  
Registration No. 45,608

Date: March 10, 2004

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

239599v1